WHAT IS CLAIMED IS:

1/. A method of heat-shrinking sleeves made from a film of heat-shrink plastics material and engaged individually on articles such as bottles, the method comprising the following successive steps:

a) placing a single article on a moving support, a sleeve being engaged on said article;

b) transferring the article together with its sleeve into a pre-heater chamber at a controlled temperature, and maintaining said article in said chamber for a predetermined duration so as to prepare the film constituting the sleeve in optimum manner for subsequently shrinking the sleeve onto the article;

c) passing the article together with its sleeve at a controlled speed through a shrinkage chamber at controlled temperature, the shrinkage chamber being adjacent to the pre-heater chamber, thereby causing the sleeve to shrink onto the article; and

d) removing the article coated in its shrunk-on sleeve from the support.

2/. A method according to claim 1, wherein the parameters of temperature, travel speed of the support, and time are controlled as a function of the article in question and of the film constituting the sleeve in question.

3/. A method according to claim 2, wherein the parameters are controlled by a programmable controller governing the sequences of operations implemented in said method.

4/. A method according to claim 1, wherein the heating obtained in the pre-heater chamber is obtained by the effect of radiation.

5/. A method according to claim 1, wherein the temperature that exists inside the shrinkage chamber is obtained by blowing in hot air and by diffusing the blown-in air.

6/. A method according to claim 5, wherein the air blown into the shrinkage chamber is also made use of periodically for maintaining the desired temperature inside the pre-heater chamber.

7/. A method according to claim 1, wherein the movement of the moving support while transferring the article into the pre-heater chamber and while causing said article to pass through the shrinkage chamber takes place along a single vertical direction.

8/. A method according to claim 7, wherein the support is caused to revolve at controlled speed about a vertical axis both before and during the passage of the article together with its sleeve through the shrinkage chamber.

9/. A method according to claim 7, wherein the moving support is caused to move axially at varying speed in order to optimize the duration of a complete cycle.

10/. A heat-shrink machine for implementing a method according to claim 1, the machine comprising:

- a stationary machine structure;
- an article support mounted to move relative to the stationary structure along a vertical central axis between a low position for installing or removing an article, and a high position in which the article is fully contained in a pre-heater chamber surmounting a shrinkage chamber; and
- a controller governing the parameters of temperature, travel speed of the support, and time during the sequences of operations of the method.

11/. A machine according to claim 10, wherein the article support is mounted to be capable also of revolving about its own central vertical axis.

12/. A machine according to claim 10, wherein the article support is arranged to center the supported article on the vertical central axis, and possibly also to protect all or part of the bottom zone of said article.

13/. A machine according to claim 10, wherein the pre-heater chamber is constituted by a radiant chimney carried by the shrinkage chamber and centered on the vertical central axis of the article support.

14/. A machine according to claim 13, wherein the radiant chimney is of variable wall thickness and/or cross-section in the event of there being significantly different shrinkage percentages between bottom and top zones of the sleeve to be shrunk onto the article.

15/. A machine according to claim 10, wherein the shrinkage chamber is annular in structure, and is centered on the vertical central axis of the article support.

16/. A machine according to claim 15, wherein the annular shrinkage chamber is connected via a tube to a hot air blower assembly and includes components serving to diffuse the blown-in air, said chamber having a cylindrical inside wall presenting at least one slot for delivering the diffused hot air.

17/. A machine according to claim 16, wherein the inside wall of the annular shrinkage chamber presents a plurality of slots which are inclined relative to the horizontal.

18/. A machine according to claim 16, wherein the components for diffusing the blown-in air are constituted by strips of metal wool.

19/. A machine according to claim 16, including an elevator secured firstly to the article support which is mounted to be capable also of revolving about its own central vertical axis, and secondly to a motor for causing said article support to revolve, together with a motor actuating said elevator in order to cause the article support to move vertically axially, and the controller of said machine is connected to said two motors and to the hot air blower assembly associated with the annular shrinkage chamber in order to govern the various parameters of temperature, speed, and time.

20/. A machine according to claim 19, wherein the controller is programmable specifically to take account of the dimensions of the article in question and the temperature of said article when it is put into place in said machine, and also to take account of the thickness and the nature of the film constituting the sleeve in question.

21/. A machine according to claim 10, including a protective cover with a window enabling the article to be put into place and removed manually without any risk of touching hot parts of said machine.